ABSTRACT

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The adaptive bandwidth throttling system implements a graceful diminution of services to the clients by delaying a first class of services provided by a network server in response to the effective bandwidth utilized by this network server exceeding a first threshold. If the demand for the bandwidth by this network server exceeds a second threshold, the bandwidth throttling system escalates the throttling response and blocks the first class of services from execution and can also concurrently delay execution of a second class of services. The implementation of the throttling process can be varied, to include additional levels of response or finer gradations of the response, to include subsets of a class of In addition, the threshold levels of bandwidth used to trigger the throttling response can be selected as desired by the system administrator. Typically, once the effective bandwidth utilization is approximately equal to the allocated bandwidth for the network server, the first level of the hierarchical bandwidth throttling is activated. The second level of the hierarchical bandwidth throttling is activated once the effective bandwidth utilization exceeds the allocated bandwidth for the network server by greater than a predetermined amount.

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